WHAT IS CLAIMED IS:

1.   A method for assigning call priority in a packet switched environment, comprising:

receiving a request to establish a connection to a dialed number;

determining a priority for the connection based on the dialed number; and

establishing the connection based on the priority.

2.   The method of Claim 1, further comprising:

generating a priority certificate based on the priority; and

attaching the priority certificate to the communication packets of the connection.

3.   The method of Claim 2, further comprising processing the communication packets based on the priority certificate.

4.   The method of Claim 2, wherein the certificate provides the communication packet with a higher priority to CPU threads processing communication packets for the connection.

5.   The method of Claim 1, further comprising increasing the priority of network voice packets associated with the connection relative to other packets.

6.   The method of Claim 2, wherein the certificate provides the communication packet with a higher priority to access gateway trunks relative to other connections.

7.   The method of Claim 2, wherein the certificate provides the communication packet with a higher priority to access network bandwidth for voice quality relative to other connections.

8.   The method of Claim 1, further comprising notifying network users of a need to make resources available for a high-priority connection.

9.   The method of Claim 1, further comprising:

determining whether adequate resources are available for the connection;

if not available, pre-empting other connections to free up resources for the

5   connection; and

establishing the connection using the freed-up resources.

10.   The method of Claim 9, freeing up resources comprising downgrading

the quality of service parameters of the other connections.

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11.   The method of Claim 9, further comprising notifying affected users

that their connections are subject to preemption.

12.   The method of Claim 1, further comprising:

15   determining if adequate resources are available for the connection; and

if not available, queuing the connection as first to receive resources as they

become available.

13.   The method of Claim 1, further comprising queuing higher priority

20   connections; and

pre-empting connections with a lower relative priority.

14.   The method of Claim 9, determining whether adequate resources are

available comprising:

25   determining a path for the connection; and

determining whether adequate resources are available along the path.

15.   The method of Claim 1, further comprising determining resources

required to establish the requested connection and provide the connection with

30   priority to the needed resources.

16.   The method of Claim 1, further comprising:

identifying currently established connections using resources required to establish the requested connection; and

pre-empting the connections using the required resources to establish the requested connection.

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17.   The method of Claim 1, further comprising monitoring network resources to determine when sufficient resources are available to establish the requested connection.

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18.   The method of Claim 1, further comprising monitoring end-point usage of augmented priority.

19.   The method of Claim 18, further comprising modifying the priority of the connection based on the end-point usage.

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20.   A system for assigning call priority in a packet switched environment, comprising:

a means for receiving a request to establish a connection to a dialed number;

a means for determining a priority for the connection based on the dialed number; and

a means for establishing the connection based on the priority.

21.   The system of Claim 20, further comprising:

a means for generating a priority certificate based on the priority; and

a means for attaching the priority certificate to the communication packets of the connection.

22.   The system of Claim 21, further comprising a means for processing the communications packets based on the priority certificate.

23.   The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to CPU threads processing communication packets for the connection.

24.   The system of Claim 20, further comprising a means for increasing the priority of network voice packets associated with the connection relative to other packets.

25.   The system of Claim 21, wherein the certificate provides the communication packets with a higher priority to access gateway trunks relative to other connections.

26.   The system of Claim 20, wherein the certificate provides the communication packets with a higher priority to access to network bandwidth for voice quality relative to other connections.

27.   The system of Claim 20, further comprising a means for notifying network users of a need to make resources available for a high-priority connection.

28.   The system of Claim 20, further comprising:

a means for determining whether adequate resources are available for the connection;

a means for pre-empting other connections if not available; and

a means for establishing the connection using the freed-up resources.

29.   The system of Claim 28, further comprising a means for downgrading the quality of service parameters of other connections.

30.   The system of Claim 28, further comprising a means for notifying affected users that their connections are subject to preemption.

31.   The system of Claim 20, further comprising:

a means for determining if adequate resources are available for the connection; and

a means for by queuing the connection as first to receive resources as they become available, if resources are not available.

32.   The system of Claim 20, further comprising a means for queuing higher priority connections; and

a means for pre-empting connections with a lower relative priority.

33.   The system of Claim 28, the means for determining whether adequate resources are available comprising:

a means for determining a path for the connection; and

a means for determining whether adequate resources are available along the path.

34. The system of Claim 20, further comprising a means for determining resources required to establish the requested connection and provide the connection with priority to the needed resources.

35. The system of Claim 20, further comprising:

a means for identifying currently established connections using resources required to establish the requested connection; and

a means for pre-empting the connections using the required resources to establish the requested connection.

36. The system of Claim 20, further comprising a means for monitoring network resources to determine when sufficient resources are available to establish the requested connection.

37. The system of Claim 20, further comprising a means for monitoring end-point usage of augmented priority.

38. The system of Claim 37, further comprising a means for modifying the priority of the connection based on the end-point usage.

39. A system for assigning call priority in a packet switched environment, comprising:

logic encoded on a computer-readable medium; and

the logic operable to receive a request to establish a connection to a dialed number, determine a priority for the connection based on the dialed number and establish the connection based on the priority.

40. The system of Claim 39, the logic further operable to:

generate a priority certificate based on the priority; and

attach the priority certificate to the communication packets of the connection.

41. The system of Claim 39, the logic further operable to process the communication packets based on the priority certificate.

42. The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to CPU threads associated with the connection.

43. The system of Claim 39, the logic further operable to increase the priority of network voice packets associated with the connection relative to other packets.

44. The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to access gateway trunks relative to other connections.

45. The system of Claim 39, wherein the certificate provides the communication packet with a higher priority to access network bandwidth for voice quality relative to other connections.

46. The system of Claim 39, the logic further operable to notify network users of a need to make resources available for a high-priority connection.

47.   The system of Claim 39, the logic further operable to:

determine whether adequate resources are available for the connection;

pre-empting other connections to free up resources for the connection if not

5   available; and

establish the connection using the freed-up resources.

48.   The system of Claim 47, freeing up resources comprising downgrading

the quality of service parameters of other connections.

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49.   The system of Claim 47, the logic further operable to notify affected

users that their connections are subject to preemption.

50.   The system of Claim 39, the logic further operable to:

15   determine if adequate resources are available for the connection; and

queue the connection if not available, as first to receive resources as they

become available.

51.   The system of Claim 39, the logic further operable to:

20   queue higher priority connections; and

preempt connections with a lower relative priority.

52.   The system of Claim 47, logic operable to determine whether adequate

resources are available comprising logic operable to:

25   determine a path for the connection; and

determine whether adequate resources are available along the path.

53.   The system of Claim 39, the logic further operable to determine

resources required to establish the requested connection and provide the connection

30   with priority to the needed resources.

54.   The system of Claim 39, the logic further operable to:

identify currently established connections using resources required to establish the requested connection; and

preempt the connections using the required resources to establish the requested connection.

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55.   The system of Claim 39, the logic further operable to monitor network resources to determine when sufficient resources are available to establish the requested connection.

10   56.   The system of Claim 39, the logic further operable to monitor end-point usage of augmented priority.

57.   The system of Claim 56, the logic further operable to modify the priority of the connection based on the end-point usage.

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